


ox → 

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

| Complete if Known | |
|-------------------------------|-------------------|
| Application Number | 10/720,582 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Kutsovsky |
| Group Art Unit | 1754 |
| Examiner Name | Cooke, Colleen P. |
| Attorney Docket Number | 02019CON |
| LVM Reference No. | 225308 |

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 1 |
|-------|---|----|---|

[illegible]

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|-------------|-------------------------|---------------------------------|--------------|---------------------------------------|---------------------|-------------|------|
| Examiner Initials | Doc. No. | Foreign Patent Document | | | Name of Patentee or Applicant | Date of Publication | Translation | |
| | | Office | Application or Patent Number | Kind Code | | | Yes | No** |
| CL | CT | DE | 199 55 456 | A1 | Degussa-Huls AG | May 23, 2001 | | X* |
| ↓ | CU | EP | 0 471 139 | A2 | Corning Incorporated | Feb. 19, 1992 | | |
| | CV | WO | 90/10596 | A1 | TSL Group PLC | Sep. 20, 1990 | | |
| | CW | WO | 90/15019 | A1 | Cabot Corporation | Dec. 13, 1990 | | |
| CL | CX | WO | 98/09753 | A1 | Nanomaterials Research Corporation | Mar. 12, 1998 | | |

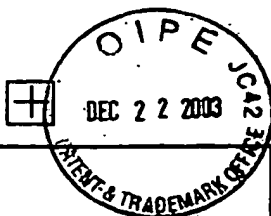
| OTHER - NON PATENT LITERATURE DOCUMENTS | | | | |
|---|-------------|--|-------------|------|
| Examiner Initials | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation | |
| | | | Yes | No** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Coler P. Cooke

2/3/06

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

Please type a plus sign (+) inside this box →



Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 4 |
|-------|---|----|---|

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 10/720,582 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Kutsovsky |
| Group Art Unit | Unassigned |
| Examiner Name | Unassigned |
| Attorney Docket Number | 02019 |
| LVM Docket Number | 225308 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Doc. No. | U.S. Patent Document | | Name of Patentee or Applicant | Date of Publication | Filing Date If Appropriate |
|-------------------|----------|------------------------------|-----------|-------------------------------|---------------------|----------------------------|
| | | Application or Patent Number | Kind Code | | | |
| CL | AA | Re. 28,974 | | Morgan et al. | Sep. 21, 1976 | |
| | AB | 2,631,083 | | Engelson et al. | Mar. 10, 1953 | |
| | AC | 2,693,406 | | Wendell, Jr. et al. | Nov. 2, 1954 | |
| | AD | 2,771,344 | | Michel et al. | Nov. 20, 1956 | |
| | AE | 2,773,741 | | Antonsen | Dec. 11, 1956 | |
| | AF | 2,780,525 | | Wendell, Jr. et al. | Feb. 5, 1957 | |
| | AG | 2,801,901 | | Dingman et al. | Aug. 6, 1957 | |
| | AH | 2,803,038 | | Holland et al. | Aug. 20, 1957 | |
| | AI | 2,828,186 | | Dingman et al. | Mar. 25, 1958 | |
| | AJ | 2,829,949 | | Wendell, Jr. et al. | Apr. 8, 1958 | |
| | AK | 2,847,316 | | Michel et al. | Aug. 12, 1958 | |
| | AL | 3,006,738 | | Wagner | Oct. 31, 1961 | |
| | AM | 3,007,774 | | Stokes et al. | Nov. 7, 1961 | |
| | AN | 3,024,089 | | Spencer et al. | Mar. 6, 1962 | |
| | AO | 3,065,093 | | Berstein et al. | Nov. 20, 1962 | |
| | AP | 3,112,210 | | Carpenter et al. | Nov. 26, 1963 | |
| | AQ | 3,130,008 | | Stokes et al. | Apr. 21, 1964 | |
| | AR | 3,166,542 | | Orzechowski et al. | Jan. 19, 1965 | |
| | AS | 3,203,762 | | Carpenter | Aug. 31, 1965 | |
| CL | AT | 3,205,177 | | Orzechowski et al. | Sep. 7, 1965 | |
| | AU | 3,205,178 | | Orzechowski et al. | Sep. 7, 1965 | |
| | AV | 3,212,911 | | Berstein et al. | Oct. 19, 1965 | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials | Doc. No. | Foreign Patent Document | | | Name of Patentee or Applicant | Date of Publication | Translation | |
|-------------------|----------|-------------------------|------------------------------|-----------|-------------------------------|---------------------|-------------|------|
| | | Office | Application or Patent Number | Kind Code | | | Yes | No** |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

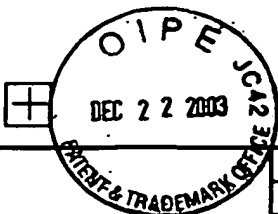
OTHER - NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation | |
|-------------------|----------|--|-------------|------|
| | | | Yes | No** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | |
|--------------------|-------------------------|-----------------|--------|
| Examiner Signature | <i>Colleen L. Coode</i> | Date Considered | 2/3/06 |
|--------------------|-------------------------|-----------------|--------|

- * A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
- + An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

Please type a plus sign (+) inside this box →



Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 2 | of | 4 |
|-------|---|----|---|

Complete if Known

| | |
|------------------------|--------------------|
| Application Number | 10/720,582 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Yakov E. KUTSOVSKY |
| Group Art Unit | Unassigned |
| Examiner Name | Unassigned |
| Attorney Docket Number | 02019 |
| LVM Docket Number | 225308 |

U.S. PATENT DOCUMENTS

| Examiner Initials | Doc. No. | U.S. Patent Document | | Name of Patentee or Applicant | Date of Publication | Filing Date If Appropriate |
|-------------------|----------|------------------------------|-----------|-------------------------------|---------------------|----------------------------|
| | | Application or Patent Number | Kind Code | | | |
| CL | AW | 3,322,499 | | Carpenter et al. | May 30, 1967 | |
| | AX | 3,363,980 | | Krinov | Jan. 16, 1968 | |
| | AY | 3,365,274 | | Carpenter et al. | Jan. 23, 1968 | |
| | AZ | 3,372,001 | | Wendell | Mar. 5, 1968 | |
| | BA | 3,406,228 | | Hardy et al. | Oct. 15, 1968 | |
| | BB | 3,455,653 | | Aftandilian | Jul. 15, 1969 | |
| | BC | 3,488,204 | | Jordan et al. | Jan. 6, 1970 | |
| | BD | 3,493,342 | | Weaver et al. | Feb. 3, 1970 | |
| | BE | 3,510,291 | | Brush | May 5, 1970 | |
| | BF | 3,510,292 | | Hardy et al. | May 5, 1970 | |
| | BG | 3,607,049 | | Weaver, Jr. et al. | Sep. 21, 1971 | |
| | BH | 3,619,140 | | Morgan et al. | Nov. 9, 1971 | |
| | BI | 3,663,283 | | Herbert et al. | May 16, 1972 | |
| | BJ | 3,922,335 | | Jordan et al. | Nov. 25, 1975 | |
| | BK | 4,023,961 | | Douglas et al. | May 17, 1977 | |
| | BL | 4,879,104 | | List et al. | Nov. 7, 1989 | |
| CL | BM | 4,937,062 | | Jordan et al. | Jun. 26, 1990 | |
| | BN | 6,086,841 | | Lee | Jul. 11, 2000 | |
| | BO | 6,364,944 | | Mahmud et al. | Apr. 2, 2002 | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials | Doc. No. | Foreign Patent Document | | | Name of Patentee or Applicant | Date of Publication | Translation | |
|-------------------|----------|-------------------------|------------------------------|-----------|-------------------------------|---------------------|-------------|------|
| | | Office | Application or Patent Number | Kind Code | | | Yes | No** |
| CL | BP | JP | 59-223217 | A | Tokuyama Soda KK | Dec. 15, 1984 | X | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER - NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation | |
|-------------------|----------|--|-------------|------|
| | | | Yes | No** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Examiner Signature

William P. Burke

Date Considered

2/3/06

* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

Please type a plus sign (+) inside this box →



Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 3 | of | 4 |
|-------|---|----|---|

Complete if Known

| | |
|------------------------|--------------------|
| Application Number | 10/720,582 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Yakov E. KUTSOVSKY |
| Group Art Unit | Unassigned |
| Examiner Name | Unassigned |
| Attorney Docket Number | 02019 |
| LVM Docket Number | 225308 |

OTHER - NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation | |
|-------------------|----------|--|-------------|------|
| | | | Yes | No** |
| ✓ | BQ | BRIESEN et al., "The effect of precursor in flame synthesis of SiO ₂ ," <i>Chem. Eng. Sci.</i> , 53(24), 4105-4112 (1998) | | |
| ✓ | BR | BRIESEN et al., "Synthesis of SiO ₂ particles from organometallic precursors," <i>World Congress on Particle Technology</i> , 3, 1-6 (1998) | | |
| ✓ | BS | BRUNAUER et al., "Adsorption of gases in multimolecular layers," <i>J. Am. Chemical Society</i> , 60, 309-319 (1938) | | |
| ✓ | BT | DAVIDSON et al., "Kinetics of the thermolysis of octamethylcyclotetrasiloxane in the gas phase," <i>J.C.S. Faraday Transactions I</i> , 71, 2260-2265 (1975) | | |
| ✓ | BU | DAVIDSON et al., "Kinetics of the oxidation of octamethylcyclotetrasiloxane in the gas phase," <i>J.C.S. Faraday Transactions I</i> , 72, 1088-1095 (1976) | | |
| ✓ | BV | GLASSMAN, <i>Combustion</i> , Academic Press, Orlando (1987), pp. 15-27. | | |
| ✓ | BW | GLUMAC, "Formation and consumption of SiO in powder synthesis flames," <i>Combustion and Flame</i> , 125, 702-711 (2001) | | |
| ✓ | BX | HASEGAWA et al., "Effect of additive oxides on ultrafine CeO ₂ particles synthesized by the spray-ICP technique," <i>J. Mat. Sci. Letters</i> , 15(18), 1608-1611 (1996) | | |
| ✓ | BY | HSIEH, "Predicting heats of combustion and lower flammability limits of organosilicon compounds," <i>Fire Mater.</i> , 23, 79-89 (1999) | | |
| ✓ | BZ | HUNG et al., "Formation of mixed oxide powders in flames: Part I. TiO ₂ -SiO ₂ ," <i>J. Mater. Res.</i> , 7(7), 1861-1869 (July 1992) | | |
| ✓ | CA | INGEBO et al., "Drop-size distribution for crosscurrent breakup of liquid jets in airstreams," National Advisory Committee for Aeronautics Technical Note 4087 (1957) | | |
| ✓ | CB | KAMMLER et al., "Flame synthesis of nanoparticles," <i>Chem. Eng. Technol.</i> , 24(6), 583-596 (2001) | | |
| ✓ | CD | KAMMLER et al., "Scaling-up the production of nanosized SiO ₂ -particles in a double diffusion flame aerosol reactor," <i>J. Nanoparticle Res.</i> , 1, 467-477 (1999) | | |
| ✓ | CE | KAMMLER et al., "Synthesis of silica-carbon particles in a turbulent H ₂ -air flame aerosol reactor," <i>AIChE J.</i> , 47(7), 1533-1543 (July 2001) | | |
| ✓ | CF | KODAS et al., <i>Aerosol Processing of Materials</i> , 28-31, Wiley VHC, New York (1999) | | |
| ✓ | CG | KROSCWITZ, exec. ed., <i>Kirk-Othmer Encyclopedia of Chemical Technology</i> , 4 th ed., John Wiley & Sons, New York (1997), pp. 1026-1027 | | |
| ✓ | CH | MÄDLER et al., "Controlled synthesis of nanostructured particles by flame spray pyrolysis," <i>J. Aerosol Sci.</i> , 33, 369-389 (2002) | | |

| | | | |
|--------------------|--------------------------|-----------------|--------|
| Examiner Signature | <i>William P. Gotsch</i> | Date Considered | 2/3/04 |
|--------------------|--------------------------|-----------------|--------|

* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

C mplete if Kn wn

| | |
|------------------------|--------------------|
| Application Number | 10/720,582 |
| Filing Date | November 24, 2003 |
| First Named Inventor | Yakov E. KUTSOVSKY |
| Group Art Unit | Unassigned |
| Examiner Name | Unassigned |
| Attorney Docket Number | 02019 |
| LVM Docket Number | 225308 |

| | | | |
|-------|---|----|---|
| Sheet | 4 | of | 4 |
| | | | |

[illegible]

| | | | |
|--------------------|---------------|-----------------|--------|
| Examiner Signature | Colin P. Gorb | Date Considered | 2/3/16 |
|--------------------|---------------|-----------------|--------|

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).